the surface of the workpiece, the surface being prepared with a metal seed layer of no more than 1000 Angstroms thick;

providing an anode spaced from the surface of the workpiece and contacting the electroplating solution;

applying electroplating power between the surface of the workpiece and the anode using a low current for a first predetermined period of time;

applying higher current electroplating power between the surface of the workpiece and the anode for a second predetermined period of time, the noble metal being deposited into the submicron features during the first and second time periods;

halting application of electroplating power; and

disengaging the surface of the workpiece from the electroplating solution.

16. A method as set forth in claim 15 and further comprising the step of pre-rinsing the surface of the workpiece prior to bringing it into contact with the electroplating solution.

17. A method as set forth in claim 16 wherein the surface of the workpiece that is to be plated is pre-rinsed using an acidic solution.

18. A method as set forth in claim 15 and further comprising the step of spinning the workpiece at a high spin rate to remove excess electroplating solution.

19. A method as set forth in claim 16 and further comprising the steps of:

rinsing the workpiece in a spray of deionized water for a predetermined period of time; and

spin drying the workpiece at a high rotation rate.

20. A method as claimed in claim 15 wherein the electroplating solution includes ions and/or complexes of platinum for deposition on the surface of the workpiece.

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21. A method as claimed in claim 20 wherein the electroplating solution has a platinum concentration of about 10-15 g/l.

22. A method as claimed in claim 20 wherein the electroplating solution has an elevated temperature in a range between about 40°C and 80°C.

23. A method as claimed in claim 22 wherein the electroplating solution has an elevated temperature of about 65°C +/-5°C.

24. A method as claimed in claim 15 wherein the electroplating solution has a pH in a range of about 11-12.

25. A method as claimed in claim 24 wherein the initial low current is applied using a pulsed waveform.

26. A method as claimed in claim 25 wherein the higher current electroplating power has a current density between about 3 and 9 mA/cm^2.

27. A method as claimed in claim 20 wherein the electroplating solution has a pH in a range of about 2-4.

28. A method as claimed in claim 27 wherein the electroplating solution has a platinum concentration in a range of about 2-16 g/l.

29. A method as claimed in claim 28 wherein the higher current electroplating power has a current density between about 20-50 mA/cm^2.

30. A method as claimed in claim 29 wherein the higher current electroplating power is applied using a pulsed waveform.

31. A method as claimed in claim 30 wherein the pulsed waveform comprises an on-time in a range of about 1-10 ms and an off-time in a range of about 1-10 ms.

32. A method as claimed in claim 15 and further comprising the step of subjecting the surface of the workpiece to a preliminary cleaning process.

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33. A method as claimed in claim 32 wherein the preliminary cleaning process comprises the step of spraying deionized water onto the surface of the workpiece that is to be electroplated.

34. A method as claimed in claim 33 wherein the deionized water comprises at least one additive selected from the group consisting of an acid and surfactant.

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